

# *Scenario based input-output models using cross-impact analysis: a review*

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## ***Abstract***

Since the pioneering contribution by W. Leontief in his 1973 Nobel Prize lecture (Leontief, 1974) input-output models have been often associated to world models attempting to estimate global environment impacts of economic growth. Leontief, Carter and Petri (1977) introduced also the concept of scenarios regarding possible future developments of the world economy, and used their input-output models to quantify the environmental impacts and related economic consequences. In this context, scenarios were somewhat connected with expert opinions, which quite often lack of solid scientific knowledge. In this sense, cross-impact analysis might be of particular interest (Fontela, 2002). This paper reviews the literature on the theoretical and applied possibilities of linking cross-impact methods for identifying probabilistic scenarios with input-output and/or social accounting models including environmental issues, with the main purposes of improving decision-making processes towards sustainable development and other issues.

**Keywords:** Input-output models, Cross-impact analysis, Scenario building.